

# BEST AVAILABLE COPY

## REMARKS

Applicant's counsel thanks the Examiner for the careful consideration given the application.

The following remarks are in reference to the telephone conference held on December 15, 2005 between Examiner Lan Dai Thi Truong and John Harris. During the telephone conference, Examiner Truong requested the Applicant to submit a 37 C.F.R. 1.116 Amendment with remarks or an RCE with amendments to the claim. The Applicant respectfully submits a 37 C.F.R. 1.116 Amendment with the remarks to request the Examiner reconsider and withdraw the rejections.

### Claim rejections under U.S.C. 103(a)

The Examiner rejected claims 1, 4-5, 8, 10, 13, 15-18, 20, 24-25, 28-36, 39-40, 44 and 46 as being unpatentable over Martin et al. (US 5,979,754), hereinafter referred to as Martin, in view of Varma (U.S. 5,850,753).

The present application contains independent claims 1 and 20. Claim 1 is directed to a system for door access control and key management, which includes (1) a door administering system for administering access to each door, the door administering system having a module for managing access privilege of one or more individuals for each door and assigning access authorization to each individual for the door, (2) a key administering system for administering one or more keys separately from the administration of the access to the door, each key being uniquely assigned to a key owner, and (3) a door control/lock assembly mounted on each door, where the door control/lock assembly, the door administering system and the key administering system communicate with each other, and the door control/lock assembly identifies a user key and operates a door. Claim 20 is a method claim corresponding to system claim 1.

According to the present invention, the administrative functions of key administration and door administration are separated from each other. The door control/lock assembly operates a door in cooperation with the door administering system and the key administering system.

To illustrate how the system of claim 1 operates under the separation between the door administration and key administration, Applicant attaches an example for the Examiner's review [Example 1].

Separating the administrative functions of key administration and door administration from each other ensures that each function can be administered by different individuals who do not necessarily have access to the other administrative function. This allows key information in the key administering system to be changed without access to information in the door administering system. Similarly, this allows a new key to be registered with the key administering system without access to the information in the door administering system. Accordingly, the registered key can be quickly and easily updated (replaced or cancelled), and a new key can be quickly and easily stored in the key administering system.

Further, a single key, assigned at the key administering system, may be used to unlock many doors as authorized by the door administering system. Changing of the key at the key administering system affects the relationship between that key and the doors to which access has been granted. Similarly, a single door may have authorized access by many separate keys, each registered in its own key administration system.

The system of Martin contains no provision for a user to change his identity card once he has been given permission to open a particular door.

The Examiner acknowledged that Martin does not teach a key administering system as recited in claim 1. The Examiner relied on Varma and stated: "Varma discloses "a card reader" which is equivalent to "a key administering system" can be updated by itself with "a new access code" which is equivalent to "a key." (col. 1, lines 31-59 of Varma) [Emphasis added]

Col. 1, lines 26-27 of Varma states:

"A guest will normally receive a card bearing an access code unique to his room". [Emphasis added]

Varma assigns access authorization to a guest (i.e. individual) for a door/room by assigning an access code (i.e. key) to the guest (i.e. key owner). The access code (i.e. key) of Varma is tightly linked to the administration of the associated door/room.

Col. 1, lines 19-23 of Varma states:

"A magnetic card reader is mounted directly to the door of a hotel room, and the key-operated spring biased latch that normally locks the door is replaced with a latch that releases the door releases in response to operation of the card reader." [Emphasis added]

Each card reader of Varma is allocated to a door to open that door. Thus, the card reader of Varma is directly linked to the operation of the associated door.

The card reader of Varma manages access to the associated door/room with access code information.

Col. 1, lines 33-35 of Varma states:

"After a guest's departure, hotel cleaning staff triggers the card reader to change the guest access code, and the card reader then updates the access code..."

The card reader of Varma updates information on an access code(s) which is authorized to open the associated door. In other words, the card reader of Varma updates access authorization information of that door by updating the access code information. Updating the access authorization information of one door does not automatically update the access authorization of other doors to which the same guest may have had access.

Varma also discloses a keyboard 32 that is positioned proximate to the door 10 (Figure 1). The codes can be entered and altered in a conventional manner with the keyboard 32 by entering appropriate codes instructing editing functions (col. 6, lines 52-55 of Varma).

However, Varma merely establishes a one to one relationship between the card reader or keyboards (potentially with several allowed codes) and doors. By contrast, the system of claim 1 is capable of establishing a one to many relationship between keys and doors and, conversely, a many to one relationship between doors and keys.

In Varma, the guest code pertains only to the door at which the card reader/keyboard is located. The card reader and keyboard of Varma cannot change the guest code for other doors to which the guest has been given access in the same establishment or in other establishments. The card reader and keyboard of Varma cannot serve as the key administering system of claim 1.

The Examiner stated: "The computer at front desk is physically separated with card reader and updated the new access code, see (Varma: column 1, lines 31-39)." [Emphasis added]

Varma merely states that the computer is physically separated with the card reader. As described above, the access code of the guest is tightly linked to the operation of the associated door/room, and thus, is managed with the access to that door/room. The computer manages a new access code assigned to a guest with a door/room assigned to that guest. There is no suggestion in Varma that a key administration and a door administration are separated from each other.

Even if combining Marin and Varma, the combination could not reach the subject matter defined by claim 1. Thus, it is respectfully submitted that claim 1 is patentable in view of Martin and Varma.

Claim 20 is a method claim corresponding to system claim 1. None of the cited references taken alone or in combination thereof suggests or teaches the subject matter defined by claim 20. Thus, it is respectfully submitted that claim 20 is patentable in view of Martin and Varma.

Claim 25 recites a plurality of door access control and key management systems, each of which is the system for door access control and key management according to claim 1, and a Meta server. The Meta server is communicatively and operatively connected to each of the door access control and key management systems (of claim 1) via the communications network, wherein the Meta server contains the address of each separate door administering system (of claim 1) and key administering system (of claim 1).

To illustrate how the system of claim 25 operates, Applicant attaches an example for the Examiner's review [Example 2].

The architecture of claim 25 allows a key registered in any of the door access control and key management systems to unlock doors in any of the other systems. Thus, a single key assigned at one of the key administering systems, may be used to unlock any doors as authorized by any of the door administering systems. Changing of the key at the key administering system affects the relationship between that key and all of the doors to which access has been granted. Similarly, a single door may have authorized access by many separate keys, each registered in its own key administration system.

With respect to the rejection of claim 25, the Examiner stated that Marin discloses the invention substantially as claimed, including a system architecture which can be implemented in a computer hardware or software code for administering access to one or more doors.

Applicant respectfully disagrees with the Examiner. As acknowledged by the Examiner, Martin does not teach the separation of a key administration and a door administration as featured by claim 1. Thus, it is clear that Martin neither discloses nor suggests a Meta server which is communicatively and operatively connected to each of the door access control and key management systems (of claim 1) via the communications network, wherein the Meta server contains the address of each separate door administering system (of claim 1) and key administering system (of claim 1), as recited in claim 25.

As described above, the system of Martin contains no provision for a user to change his identity card once he has been given permission to open a particular door. Furthermore, the use of the identity card to open doors is only valid within one establishment or perhaps several establishments controlled by one owner.

The card reader and keyboard of Varma cannot serve as the key administering system of claim 1 as described above. Varma does not add any teaching to Martin to render claim 25 unpatentable. Thus it is respectfully submitted that claim 25 is patentable in view of Martin and Varma.

Claims 4-19, 26-45 and 47 directly or indirectly depend on claim 1. Claims 21-24 and 46 directly or indirectly depend on claim 20. Hence, it is respectfully submitted that dependent claims 4-19, 21-24 and 26-47 are patentable in view of Martin and Varma.

The Examiner rejected claim 9 as being unpatentable over Martin in view of Varma and Flick (US 6,130,606). The Examiner rejected claims 14 and 45 as being unpatentable over Martin in view of Varma and Dunhame et al. (US 5,541,585). The Examiner rejected claims 11-12 and 21-22 as being unpatentable over Martin in view of Varma and Yulkowski (US 6,049,287). The Examiner rejected claims 6-7, 19, 23, 26 and 27 as being unpatentable over Martin in view of Varma and Kalajan (US 6,006,258). However, none of Flick, Dunhame et al., Yulkowski, and Kalajan adds any teaching to Martin and Varma to render claims 1, 20 and 25 unpatentable.

Hence, it is respectfully submitted that claims 1 and 4-47 are patentable in view of the cited references. Applicant respectfully requests the Examiner withdraw the rejections.

In view of the above amendments and remarks and having dealt with all the objections raised by the Examiner, reconsideration and allowance of the application is courteously requested.

If there are any further fees required by this communication, please charge such fees to our Deposit Account No. 16-0820, Order No. 34118.

Respectfully Submitted,

PEARNE & GORDON LLP

By John P. Murtaugh  
John P. Murtaugh, Reg. No. 34226

1801 East 9<sup>th</sup> Street  
Suite 1200  
Cleveland, Ohio 44114-3108  
(216) 579-1700

Date: Jan. 6, 2006

Appl. No.: 10/004,340

**Example 1**

(1) It is assumed that:

A door administering system has administered doors as follows:

User **X** is allowed to open Door **A** and Door **B**

User **Y** is allowed to open Door **A** and Door **C**

User **Z** is allowed to open Door **B**

A key administering system has administered keys as follows:

Key **M** is assigned to User **X**

Key **N** is assigned to User **Y**

Key **O** is assigned to User **Z**

(2) Doors **A**, **B** and **C** are operated properly on the above administrations as follows:

Door **A** will open when presented with Key **M** or Key **N**

Door **B** will open when presented with Key **M** or Key **O**

Door **C** will open when presented with Key **N**

(3) It is assumed that User **X** changes his key from Key **M** to Key **P** through the key administering system.

The key administering system affects the keys that will open Doors **A**, **B** and **C** simultaneously without affecting the administration of the door administering system.

The system operates properly as follows:

Door **A** will open when presented with Key **P** or Key **N**

Door **B** will open when presented with Key **P** or Key **O**

Door **C** will open when presented with Key **N**

Appl. No.: 10/004,340

**Example 2**

(1) It is assumed that:

Door Owner **A** has a door administering system for Door **A** and Door **D**

Door Owner **B** has a door administering system for Door **B**

Door Owner **C** has a door administering system for Door **C** and Door **E**

Where:

Door **A** and Door **D** are in one establishment

Door **B** is in a separate establishment

Door **C** is in another separate establishment

Door **E** is in yet another separate establishment

And the establishments are owned and controlled by separate parties.

(2) It is assumed that:

User **X** has access to a key administering system in which he has declared  
Key **M** as his key

User **Y** has access to a key administering system in which he has declared  
Key **N** as his key

User **Z** has access to a key administering system in which he has declared  
Key **O** as his key

(3) Now it is assumed that, with each door owner using his respective door  
administering system:

Door Owner **A** allows:

User **X** to open Door **A**

User **Y** to open Door **A** and Door **D**

Door Owner **B** allows:

User **X** to open Door **B**

User **Z** to open Door **B**

Door Owner **C** allows:

User **X** to open Door **C**

User **X** to open Door **E**

User **Y** to open Door **E**



User Z to open Door E

(4) Doors A, B, C, D, and E are operated properly on these permissions and declarations as follows:

Door A will open when presented with Key M or Key N

Door B will open when presented with Key M or Key O

Door C will open when presented with Key M

Door D will open when presented with Key N

Door E will open when presented with Key M or Key N or Key O

(5) It is assumed that User X uses his key administering system to change his key from Key M to Key P.

Then, the key administering system used by User X affects the keys that will open Doors A, B, C, D and E simultaneously without the participation of Door Owners A or B or C. The system operates properly as follows:

Door A will open when presented with Key P or Key N

Door B will open when presented with Key P or Key O

Door C will open when presented with Key P

Door D will open when presented with Key N

Door E will open when presented with Key P or Key N or Key O

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**